

# ILLINOIS AGRICULTURIST

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Fifty-Fourth Year

MARCH, 1950

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*"Nothing is stronger than  
public opinion. Given the  
facts, nothing is wiser."*

## *On Competition*

Hatch a good idea and you hatch competitors.

It works this way—to take General Electric as an example:

In 1934, the automatic blanket was initially developed by General Electric. Today there are twelve other companies making electric blankets in competition with G. E.

In 1935, General Electric first demonstrated fluorescent lamps to a group of Navy officers. In 1938, the first fluorescent lamps were offered for sale. Today they are being manufactured by a number of companies.

The first turbine-electric drive for ships was proposed and designed by G-E engineers. Today four companies in this country build this type of ship-propulsion equipment.

After several years of laboratory development, General Electric began production and sale of the Disposall kitchen-waste unit in 1935. Today fourteen other companies are in this field.

The first practical x-ray tube, developed at General Electric years ago, is now a highly competitive business for seven manufacturers.

In 1926, a practical household refrigerator with a hermetically sealed unit was put on the market by General Electric. Today 34 companies are manufacturing household refrigerators with hermetically sealed mechanisms.

\* \* \*

Research and engineering snowplow the way, not only for new public conveniences, but also for new companies, new jobs.

There are 20% more businesses today than there were immediately after the war.

Industry furnishes over 10,000,000 more jobs than ten years ago.

The average family owns more and better products of industry than ten years ago.

Any American company that plows back money into research and engineering development makes new business not only for itself, but for others.

The economy that does most to foster competition is the one that makes easiest the establishment and growth of business.

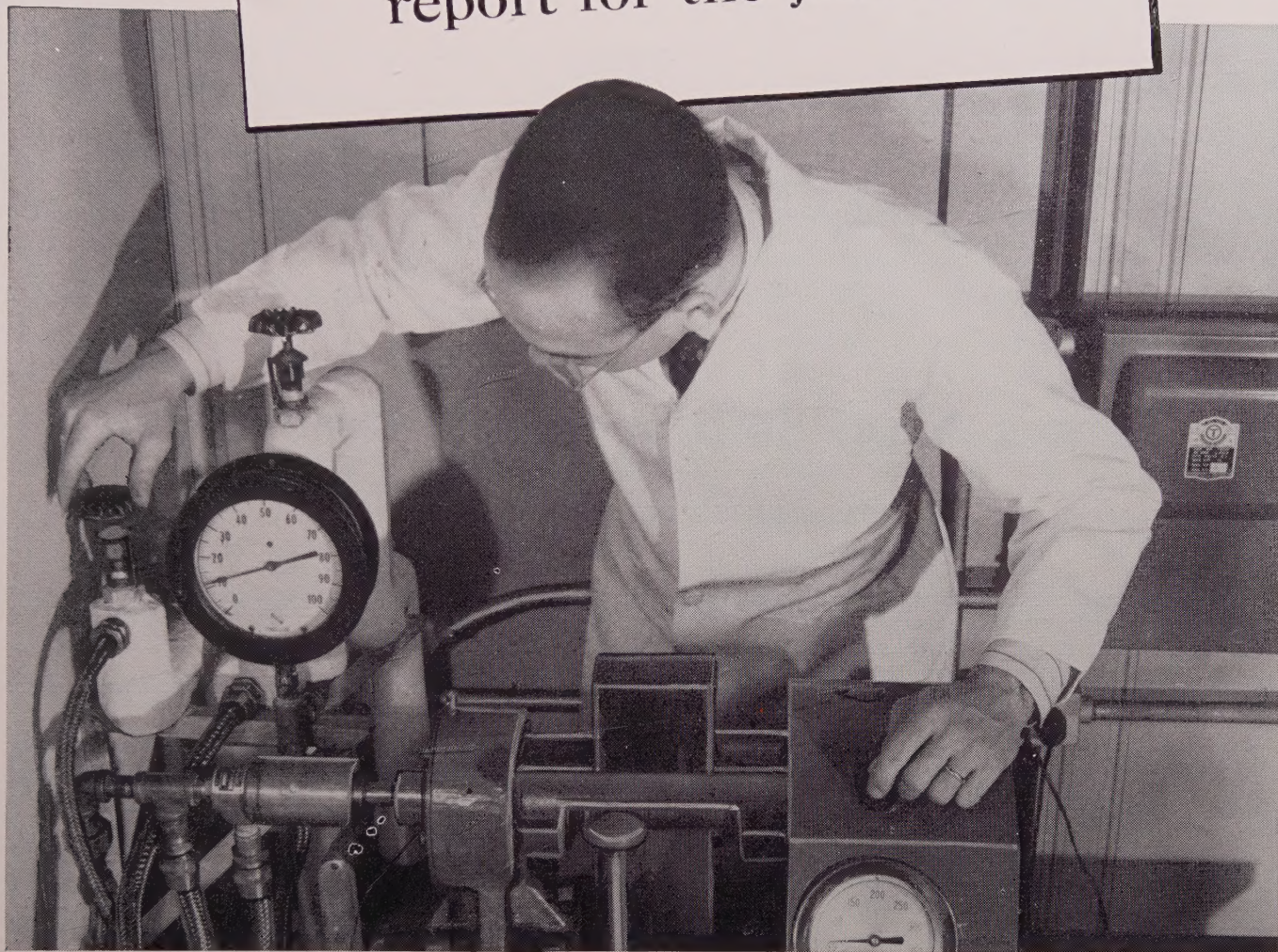
*You can put your confidence in—*

**GENERAL  ELECTRIC**

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We have good news to  
report for the journals



SOME JOURNALS are technical publications. Some journals are the parts of rotating shafts that turn in bearings.

For both kinds of journals, there's good news in Standard Oil's performance testing program. One result is a new testing device for mill and locomotive driving-journal grease that enables us to tell more accurately than ever before what our greases will do under actual conditions of use. That, in turn, enables us to proceed more directly with the job of making our greases still better.

Standard Oil took the lead in performance testing, and is a leader today. During the war

our tests furnished information that enabled the Army to procure certain products with greatly increased reliability of performance. Some of our tests have become a part of government specifications. Many users of our products are benefiting, both from better products and from more accurate information.

As time goes on, we are doing more and more performance testing. In some cases, we have to develop not only the tests but also the testing equipment. But to Standard Oil researchers and engineers, any effort is worth while if it will help make better, more useful petroleum products.

Standard Oil Company

(INDIANA)





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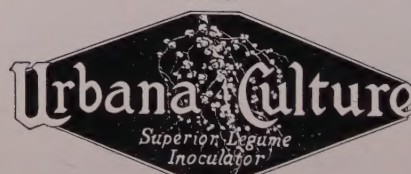
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URBANA, ILLINOIS



# THE ILLINOIS AGRICULTURIST

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## OUR PLATFORM

To acquaint students and faculty in the College of Agriculture, agricultural leaders, and the rural people of Illinois with the latest scientific developments in agriculture and home economics.

To report events of general interest on the College of Agriculture campus.

To serve as a means of training agricultural and home economics students in journalism and business administration.

To promote the best interests of agricultural and home economics students on the campus of the University of Illinois.

## Going Forward . . .

Perhaps you have noticed that when you put yourself in a particular angle or position with something you can see it in a much better perspective. An art connoisseur will always stand back from a painting that he is trying to judge. Music lovers at a symphony concert like to sit a little back in the hall, to hear the work as a whole in proper balance. We had a similar experience this past February while at Farm and Home Week.

In this particular instance we were sitting in the Agriculturist booth amidst the center of farmer and homemaker conversations and their registration activities. The majority of these guests were farmers and homemakers or people coming from farm families. And by sitting in the middle of all this activity for three or four days permitted us to do some thinking about these people who came from all parts of the state in quest of more information on how to do a better job—a better job of farming for themselves and everyone concerned. They're pretty great people, these farmers and farm families. Certainly you don't have to attend Farm and Home week to realize that point, but it helps to emphasize it.

These people have their hearts in their work. You can bet that during these many sessions we didn't hear any person or group of persons get up and propose the idea of striking for higher farmer returns. No, sir, they want to keep their free, independent way of life which exemplifies itself only so dearly in rural living. But in spite of all hopes, desires, and creative actions, can this independent way be kept?

After all, it's not so much the 400-500 million dollar corn crop annually produced nor is it because farmers own 88 per cent of the total Illinois land area that makes Illinois farmers great. It's the farmers themselves. And this is not denying the fact that there are just as many different types of farmers as there are individuals in any other occupation.

The materialistic success among these different individuals is relative, but the intent, the purposiveness, and desire to go forward may be as great with everyone of those visitors that we saw at Farm and Home Week as it was with any one of them.

The most confronting problem among these people is how to keep the present state of affairs in check and provide an even better world for themselves and their posterity.

We as young people will in the majority of cases have to let the present administrative generation decide the fate of such tools as the hydrogen bomb and price subsidies and hope and pray there is a world left for future farmers to inhabit.

This brings up a point that was brought up at one of the Farm and Home Week gatherings. It was that America's number one crop is YOUTH which is very true. To our elders that would include people such as you and I. Therefore we have a deep rooted responsibility. Although this crop is not corn or soybeans, its cultivation also has to be carefully done to develop the inherent high yielding capacity. And only then can we be assured that the land furnishes the sap for the renewing of worldly advancement and not furnishing the saps for a betrotten system of worldly living.

**OUR COVER:** Beth Ellen Garrigus greets one of the little lambs at the University Sheep Barns. Beth Ellen, almost three years old, is the daughter of Mr. and Mrs. U. S. Garrigus. Mr. Garrigus, assistant professor of animal science, is head of the University's sheep division. Photograph by Jim Corbin, assistant in animal science.





Mary Lee Spittler, 1949 Plowboy Prom queen smiles from her regal chariot amidst the gaiety and merrymaking unique to the aggies' plowboy prom.

## *From Roses to Radishes and the Band Played On*

By Gilda Gleim, Rosemary Archibald, and Charles Marshall

A carload of pumpkins, the "best local caterer supplying refreshments of a unique nature," and sheepskin bids sold out the first agriculture dance on November 17, 1911.

Thirty-nine years ago the scene was different than it was last year. Instead of Huff gym the dance was held in the old armory on Springfield avenue which is now Annex Hall—capacity 200 couples. The pumpkins were used to cover the lights, and corn shocks and fall leaves, according to *The Daily Illini*, "concealed the cozy corners and lent attractiveness to the appearance of the walls." No box lunches in those days either, but afore-said local caterer served a meal at tables set up on the upper floor of the gym between the twelfth and thirteenth dances of the evening. And "the committee in charge is authority for the statement that the matter of refreshments has been given careful attention and that its high quality is unquestioned."

At that first dance in 1911, everyone was dressed in his 'Sunday best.' Today's plaid shirts, jeans, and gingham dresses are quite a contrast. And it is doubtful that a date for the 1911 affair would have been very welcome when he arrived with a vegetable corsage, as the 1950 date must do.

### **Campus Scout — 1911**

The Campus Scout said, "The boys will have to wiggle some to get through 'Turkey in the Straw' at the Farmer's Ball."

The dance had originally been planned

for early spring in 1911, but when the permit finally came through it was so late that the dance was moved to the fall. C. J. Elliott (now farming near Streator, Illinois) was president of the Ag club at the time and F. E. Rusher, (now with Caterpillar company), served as chairman of this Ag club sponsored dance.

The bids were quite unusual by present day standards. They had rectangular covers of thick sheepskin and long white leather ties a half inch wide. The printing was ornate English script and a whole page was devoted to 'Those With Whom I Might Have Danced.' Music was provided by Turner's 10-piece orchestra and consisted of alternate waltzes and two-steps.

### **Rooster Dance**

In 1912, *The Daily Illini* says, "As several have expressed their opinion that the character of" . . . a chanticleer (rooster) dance as a feature . . . "may be improper, the committee wishes to state there will be nothing questionable about the affair and that they are strongly opposed to anything conducive to indignity," and so they featured the rooster dance. The next day, University of Illinois students read—"the twelfth dance was a feature, 'The Chanticleer.' Two dozen roosters which until that time had been kept in total darkness, were exposed to a brilliant light and as a result crowded vigorously."

Of the 1913 Ag dance the November 7 *Daily Illini* reports, "The agitation concerning the tango took a new turn yes-

terday when the committee in charge of the Ag dance which will be held tonite, decided to have no tango music and announced that it was desired that the dancers content themselves with the time honored waltz, two-step, and Boston. They also decided that no cabs or flowers were to be allowed to destroy the democratic atmosphere of the dance."

### **"Delightfully Rural"**

Following the dance the report was that "the decorations gave an effect delightfully rural" and that "there was very little tango dancing, and what there was, was confined almost entirely to those who could really tango."

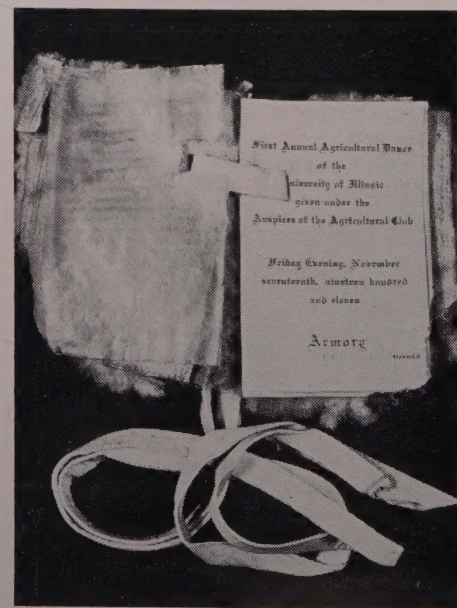
In 1928, the *Illinois Agriculturist* said, "It is reported that one girl in the ag school (household science, perhaps!) purchased a ticket dressed as a farmer, had a date with a girl friend and danced the entire evening without anyone finding out that the couple were both young ladies."

### **And Then in 1930 Some Couldn't Go**

University students were still enjoying the annual ag dance by 1930—all but the Alpha Gamma Rho fellows. When the dance rolled around that year they were all quarantined for scarlet fever!

Around 1930 and 1932 at each dance a large reprint of the program was provided for aggies and their dates to sign. Each spring the *Illinois Agriculturist* included a photo of that huge bid covered with autographs.

By 1938 the annual dance was called the Corn Cob Cotillion and was held in the ice rink. But today we know it as the Plowboy Prom, one of the highlights of the University of Illinois social season. It is held in Huff gym and is still a sellout so don't find yourself without a ticket April 28, 1950. Come on you cultivator pilots! Ask those milk maids NOW!



The first plowboy prom bid was made by using unshorn sheep skin. Courtesy C. J. Elliott, Streator, Ill.



# Axle Deep in the Road Problem

By Arthur Pille



Is this the desired utilization of modern day road technology knowledge?

Are you going to be stuck in the mud this spring? Many Illinois farmers almost dread the approach of spring. It means constant sloshing and sliding through axle-deep mud. It means muddy cars, struggling with chains and being pulled out of the worst holes.

In this day of modern superhighways, most people accept good roads as a matter of course. You can't appreciate a good road until you travel a bad one. A soft, dirt road will isolate you as effectively as the year's worst blizzard.

As the spring thaws come, the problem will become more acute. More people will want to travel, but less will be able to. Your road improvement program should be planned and initiated now.

## System of Roads Is Obsolete

While our roads are expected to carry modern traffic, they are organized and maintained on a horse-and-buggy basis. A modern vehicle can move through a township in a matter of 5 or 10 minutes and through a county in less than an hour. Yet, the majority of rural roads are still being maintained on a township basis. To be effective, the unit of road supervision should be at least as large as a county.

Each township has a full or part-time road commissioner and a more or less incomplete set of road machinery. The individual township is usually too poor to afford a well paid commissioner and a complete outfit of machinery. The present situation is similar to a farmer having a set of machinery for each field of his farm.

Expensive equipment lies idle a great deal of the time. Capital investments are higher than necessary and the re-

turns are lower. Full-time road commissioners seldom have enough to do. The part-time man usually has more work than he can handle.

In all probability, your road commissioner is doing a good job under the circumstances. He is handicapped by lack of time and help. The principal business of a community is farming. Farmers give little thought and effort to constructive criticism of road maintenance. Your roads will be no better than you make them.

Road conditions will vary from one township to another. The wealthier ones have more than enough money to provide good transportation facilities. Nevertheless, with present conditions, their welfare is bound to that of less fortunate areas. Their better facilities are too isolated to bring them real and lasting benefits.

As long as each farmer pays taxes only to be used in his immediate area, he cannot hope to profit from improvements in other areas. If the taxes were paid to a larger district, the benefits, in the form of improved roads, would be more widespread and more permanent. People would worry less about their own township and more about the county as a whole. One would no longer be able to recognize township lines by the difference in roads.

Other points which should be kept in mind are soil types and topography. Some higher areas will have no drainage problem, but very bumpy roads in dry weather. Soils vary greatly in their water-holding properties. It is important to recognize the fact that these factors

are not limited by geographical boundaries, and that an area should be considered as a whole.

## Townspeople Should Share the Problem

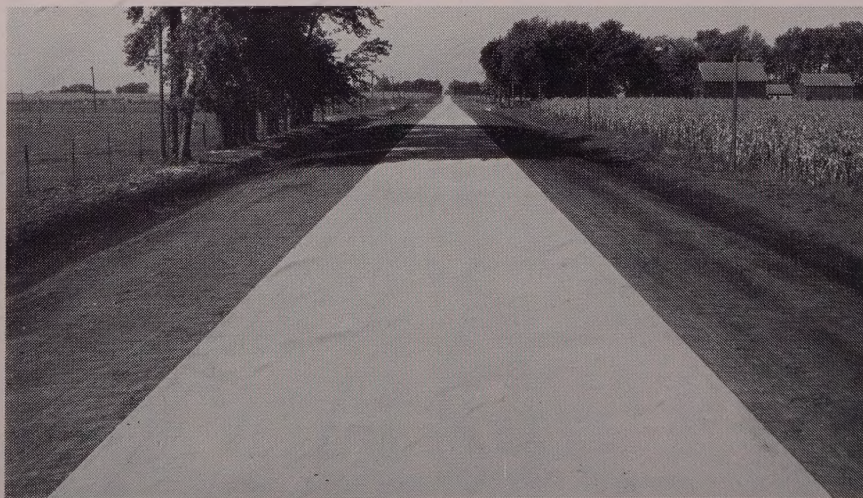
Townspeople who seldom venture into the country may look upon rural roads as solely the farmer's problem. They do not stop to realize the relation of their economy to that of the farmer. Good roads are a necessity if the farm people are to buy their goods in town. Many rural towns are being bypassed in favor of larger cities for this very reason. Likewise, they are necessary if farm products are to be marketed effectively.

Roads are a vital factor in community development. Rural and urban areas must progress together if all are to benefit. Education is dependent on good roads. Present roads are not capable of handling modern, safe school buses. If farms are to be a good market for materials that are best transported in heavy trucks, adequate roads must be constructed and maintained.

## Cooperation Is Necessary

The first step in modernizing our system is to set up road maintenance on a county basis. Second, set up the commissioner's job as a full-time job with pay high enough to attract good men. Third, interest everyone in the community by showing the benefits obtained from good roads.

Good roads can be acquired and maintained only through cooperation of the entire community. Mud holes have no respect for township lines. Since everyone benefits, everyone should pay. Will you be stuck in the mud this spring? It's all up to you.



This is a very good illustration of how country roads may be made to provide the needed transportation lanes during all types of weather. If your local road compares favorably with this one you have a fortunate situation.



## Silver Service . . .

# YOUR CHERISHED POSSESSION

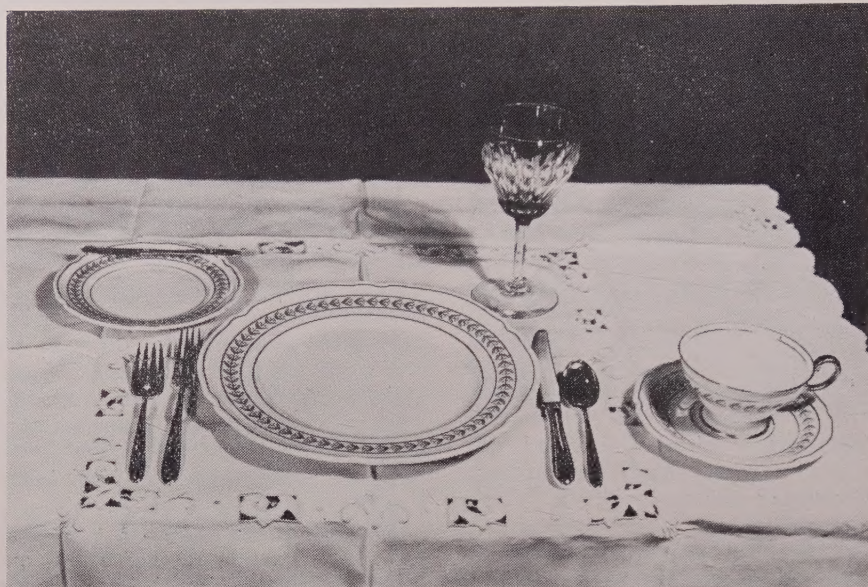
By Patricia Ringger

What's your sterling silver pattern? Are you planning to choose one soon? Though silver has provided the most potential art medium for over 2,000 years, young ladies of a few generations ago were not as fortunate as we. Only the aristocracy could afford the dinnerware which was wrought by hand from 'the Queen of Metals.' Today, manufacturers can easily produce a great variety of designs. There is a pattern to suit every individual at a price within reach of most people.

But which design will you choose? Because silver is a sturdy metal, logically the design should be strong. However, this doesn't mean that one needs to select one of the heavy baroque patterns which are appearing in great quantities on the market. Some of the simplest designs in sterling such as Towle's Craftsman and Lunt's Modern Classic are excellent examples of good strong design. Always keep in mind that silverware is to convey food to the mouth. Therefore it should have a pattern which does not detract from that purpose.

### Silver Records History

Every period in history is recorded in its silver patterns just as in its furniture design. In a richly furnished formal and traditional home, the more ornate designs as Reed and Barton's Francis First would be quite appropriate. Towle's Silver Flutes would be found in a more modern setting with a design as Gorham's Chantilly somewhere between. A simpler design as Silver Flutes is most versatile and may be used with informal



As shown here, a simple sterling pattern looks as well with china as it does with pottery.

pottery as well as your best crystal and china. Many of today's designs are direct or modified reproductions of the designs of some of the old silversmith masters.

We speak of sterling silver but what do we mean by sterling? According to our laws, 925 parts of 1,000 must be pure silver. The remaining 75 parts are copper. Silver alone is too soft for practical use, but the addition of copper provides the needed strength and rigidity. Sterling stamped on the back of your silver means it is solid throughout its

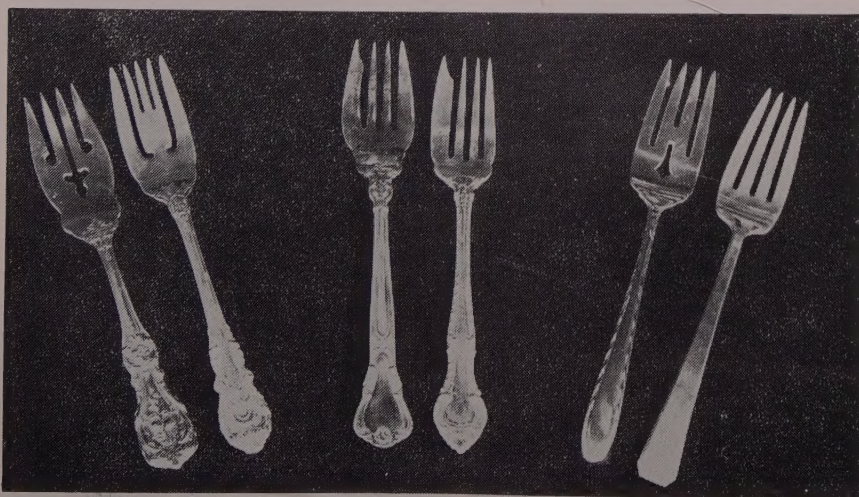
structure. A lifetime of three times a day use will not wear it out!

### Three Finishes

There are three standard finishes to sterling silver. A mirror-like surface designates the bright finish. This finish shows scratches at first, but with years of use and polishing, the multitude of scratches produce patina, a beautiful, rich, soft tone. The butler finish with its soft mellow sheen imitates the bright finish after it has acquired patina. The grey finish is whiter than the butler finish and gives less light contrast.

The craftsmanship of a sterling pattern is an important factor to consider when choosing a design. The pressure test determining whether the shank is sturdy is quite a simple test to perform. Hold the silver in the thumb and forefinger and bear down on the tip. It should bend or give only slightly. Examine the pieces for smoothness and perfection of details. You can also test the balance of silver by using a finger as support. See if the bowl or the tines balance the handle. And too, depend only on a reliable dealer and a responsible manufacturer for protection.

Maybe you can't buy twelve place settings tomorrow or even next year. Why not just begin with a spoon? Birthday and Christmas gifts or even your piggy bank can gradually add to a cherished possession you and your family can proudly use and enjoy throughout life.



Silver patterns range from ornate, such as the pair of salad forks at the left, to the simple patterns shown at the right. A multitude of variations exist between these.



*Why? What?  
Where?*



## IN THE FIELD OF F. H. A.

By Marylou Thompson

F. H. A.? F. F. A.? Tomorrow's adults are being trained every day! The Future Homemakers of America is a much newer organization than the Future Farmers of America. Although F. H. A. is only four years old, it has a membership of 235,000 homemaking students in high schools in the United States, Hawaii and Puerto Rico. Illinois leads the other states in the number of chapters and is second only to Texas, in membership.

These girls are striving "toward new horizons." F. H. A. members feel that helping make happy homes now and in the future is the most important thing they can do for democracy. Did you know that F. H. A. won a plaque for the organization who sent the greatest number of bundles to Europe? Many of the chapters have adopted foreign home economics classes and have regularly sent supplies to them.

### F. H. A. Well Organized

The national organization is divided into four regions. These in turn are divided into sub-regions. Last July, Illinois F. H. A. girls attended their sub-regional meeting in Ohio. Jeanne DeGusto from Lacon, Illinois, a state officer last year, was elected national historian at this meeting.

At the state level, a leadership training camp is held at East Bay, Bloomington, each summer. Each chapter may send one delegate. Over 400 girls exchange and learn new ideas to help their chapters.

State officers are elected and installed and six scholarships awarded to senior girls planning to go to college and major in home economics. Barbara Murphy, now a freshman at the University received one of these scholarships. These girls are chosen on the basis of their activities in F. H. A. Plaques are given to the most outstanding chapter in each section and to the most outstanding chapter in the state for activities and for international good will. Each chapter compiles its year's activities in a publication book. After these books are judged

at camp, plaques are given to the winners.

Illinois F. H. A. has 22 sections. These sections have two meetings each year—the House of Delegates in the fall and the rally in the spring. At these meetings, the girls plan and play together as well as elect section officers.

### Chapter Fathers, Too

Leadership of the local F. H. A. chapter is invested in the chapter officers with the homemaking teacher as advisor. Annually the girls elect a chapter mother who aids the advisor and helps the girls in carrying out their program. Some chapters have recently elected chapter fathers.

Besides working with chapter, section and state activities, each girl may work individually for the degrees of achievement. Degrees of Junior, Chapter, State, and American Homemaker are conferred on the girl when she completes the requirements for that degree. Then she is entitled to wear the symbol for the degree on the chain of her F. H. A. pin. The degrees are symbolized by a key, scroll, torch and rose, respectively.

The ideals and purposes of the F. H. A. organization can be summed up in the creed:

We are the Future Homemakers of America

We face the future with warm courage and high hope.

For we have the clear consciousness of seeking

Old and precious values.

For we are the builders of homes, Homes for America's future.

Homes where living will be the expression of everything

That is good and fair.

Homes where truth and love and security and faith

Will be realities, not dreams.

We are the Future Homemakers of America

We face the future with warm courage

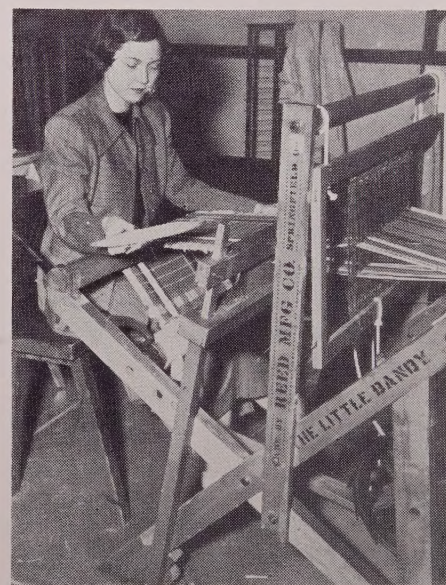
And high hope.

## Hand Weaving Is Not a Lost Art

By Patricia Ringger

Even though modern machinery turns out cloth by the hundreds of yards, hand methods are still very important in our fast moving world today. Last semester 14 girls, with classrooms in Mumford hall, wove a great many articles under the direction of Miss Mary Jane Rice. These girls were enrolled in the weaving course which is offered to students in occupational therapy and elementary education.

At the beginning of the semester, the class learns about the fundamentals of color, materials used in weaving, methods of weaving, and the various types of looms. They study how to set up these looms, and plan design problems. Then the students make five or six-inch



Jean Robinson, student in weaving, demonstrates the use of a loom during one of her class periods.

samples of each of the different types of weaves, such as satin, plain, twill, and their variations. In this way they learn to apply the techniques of weaving taught in the class.

During the rest of the semester, the students work on problems of their own designs and each student sets up a loom at least three times during the semester. They also learn about pattern drafting and designing as they work on these problems. The types of articles woven are left entirely up to the originality of the class members.

As a result, the girls turn out a large and varied assortment of articles: place mats, belts, towels, rugs, purses, suspenders, and many others.

As many as 40,000 weed seeds have been counted in a square foot of soil.



*And from the Seed...*

## THERE GREW A PLANT!

By Donald Mann

The Illinois Experiment Station is constantly making new crosses and selections that you, the Illinois farmer, might have better varieties of small grains. These varieties as well as those developed by other experiment stations are then tested for yield, adaptability, resistance or susceptibility to disease, shattering, lodging, etc. Several varieties of the different grains have been released in the last year or two and are now becoming available for wide general use.

### Soybeans

One of the new soybeans is Wabash. It is a mid-season bean similar in maturity to Potoka and Chief that combines high oil content, good standing ability, desirable height, and good quality seed. Wabash is recommended for that part of the state south of Paris and Taylorville.

It is early enough so that winter wheat can follow it although it is recommended that plantings be made prior to May 25 in the upper third of its growing area if wheat is to follow in the rotation.

Wabash has yellow seeds, gray pubescence, and white flowers. In these respects it is similar to Gibson. But Wabash is about five days earlier in maturity, is more erect, is less bushy in type of growth, and has a higher per cent of three-seeded pods than Gibson.

In tests Wabash has been one of the higher yielders and it is non-shattering and stands up better than any type in the past.

It has been observed to be freer from downy mildew than Potoka and freer from bacterial leaf blight than Gibson. Its resistance or susceptibility to other common soybean diseases seems to be about the same as other varieties now commonly grown in southern Illinois.

This new bean was grown for increase by a good number of farmers last year so there should be enough seed for fairly general distribution this spring.

A new soybean for the northern half of the state is Adams. This bean is closely related to Hawkeye and seems to yield about the same. Last year at Urbana, Adams yielded 45 bushels and Hawkeye 44. At DeKalb, Adams was the third highest yielder.

Adams is an upstanding bean maturing a little earlier than the Hawkeye. It has a high oil content and quality. There is a limited amount of seed available this year although there may be



O. T. Bonnet, professor of plant genetics, shown with Royal wheat which he developed.

enough out of Iowa for the general public.

A bean that is earlier than the Adams and the Hawkeye is the Blackhawk. It has been produced by the Regional Soybean Laboratory. Although Blackhawk was second highest at DeKalb last year, its yield record has not been too good.

Two beans that show some promise in extreme southern Illinois are Dortchsoy and S-100. Dortchsoy is a commercial selection made by a seed grower in Arkansas. It has been one of the top beans at Dixon Springs. Its main disadvantage is its lateness. S-100 is from Missouri and is for use south of Sparta. It has a good quality bean and has yielded well but it doesn't stand up too well.

### Oats

In new oat varieties, Andrew will be available for release to the general public this year. In tests it has been the highest yielder in central Illinois. It was tops at Urbana in 1949 with a yield of 55.9 and it was third at DeKalb.

Andrew was developed in Minnesota from a cross of Bond and Rainbow. It is a white seeded oat with straw about an inch taller than Clinton. Lodging occurs on soils of high fertility. It is a very early heading variety, heading about one week earlier than Clinton. However, the grain ripens slowly and is only a little earlier in maturing than Clinton.

Andrew has resistance to Helminthosporium, stem rust, certain races of smut, and all races of crown or leaf rust except race 45 which came into Illinois in 1949.

Two other varieties which show great promise in other states but which have not done quite so well in Illinois are the Zephyr and Shelby. Zephyr is a new Minnesota oat that is not very early in Illinois. It is a gray oat that has a good yield but does not stand like Clinton. Plenty of seed is available in Minnesota.

Shelby is a new Iowa oat that is late for Illinois. It shows tolerance to leaf rust strain 45 which may increase its use.

A good show ring oat is Minnesota developed Bonda. It is slightly earlier and taller than Clinton but the yield has not been as good as Clinton on either the crop experiment fields in central or northern Illinois or in the county demonstration plots. Bonda is a white oat that has a high bushel weight. It is nearly as stiff strawed as Clinton and is resistant to the same diseases—leaf rust, stem rust, and Helminthosporium victoriae.

Mindo is a central Illinois oat from Minnesota that yields pretty well. It is four to five days earlier than Clinton, but is shorter strawed and not so stiff strawed as Clinton. This yellowish-white oat is resistant to leaf rust, stem rust, smut, and Helminthosporium victoriae.

Two years' yield testing on the central and northern Illinois crop experiment fields and in 10 county demonstration plots indicates that Mindo yields compare favorably with those of Clinton.

### Wheat

There are two soft winter wheats that became available in 1948.

Royal is a bearded, white chaff, medium tall, red wheat that is stiff strawed and stands well. This selection from Illinois No. 2 has a very high test weight. It is resistant to mosaic and stem rust and is somewhat tolerant to leaf rust. It is adapted to central and southern Illinois.

Vigo is a selection from a cross between Trumbull and Fultz made at the Indiana station. It is medium maturing and fine appearing. Vigo has extremely long, smooth heads and stands tall and erect. It is resistant to mosaic, loose smut, and leaf rust being superior to Royal in resistance to leaf rust. It seems to have no resistance to black stem rust.

(Please turn to page 16)

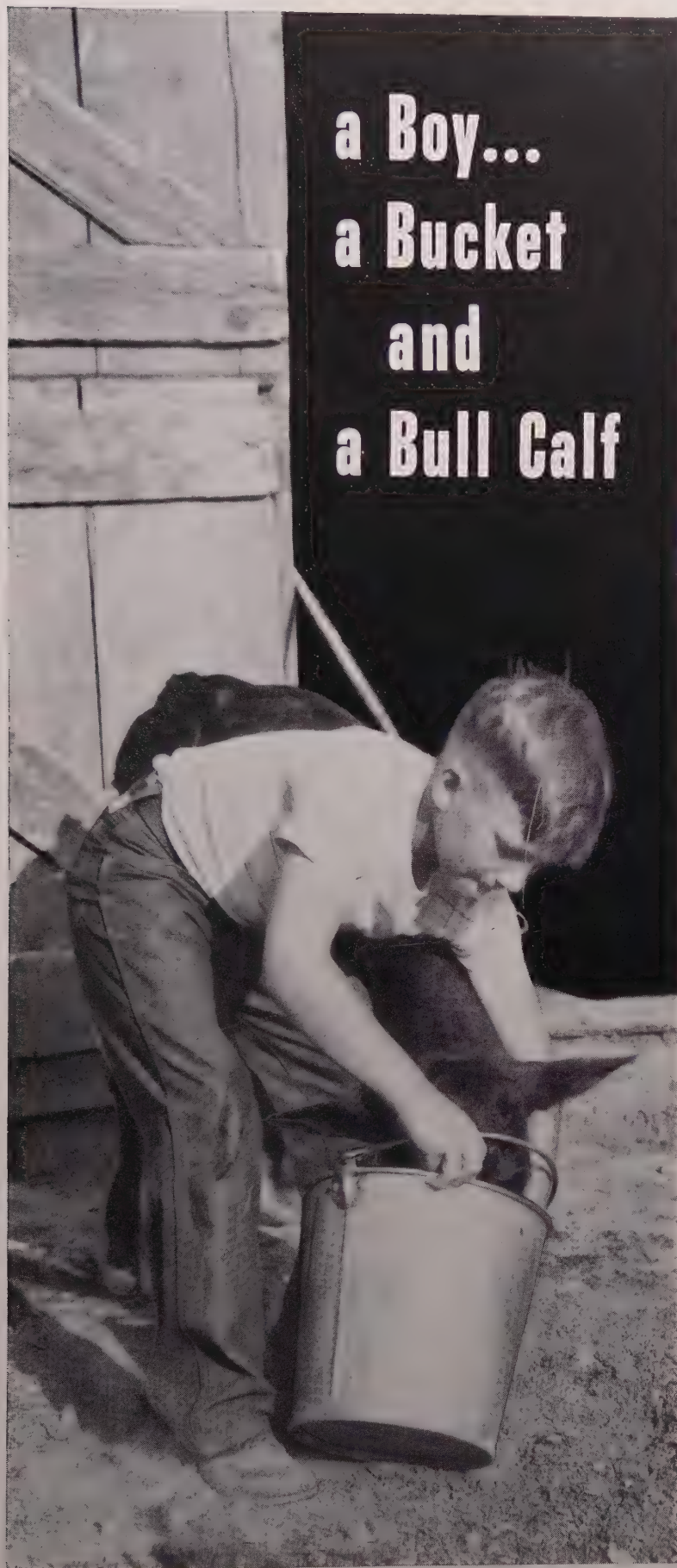


# a Boy... a Bucket and a Bull Calf

Substituting a bucket for old bossy, at weaning time, usually sets the stage for a barnyard rodeo. The meekest little calf sees red when he's faced with a pail—bucks and bawls like a wild steer. No wonder farm boys dislike playing foster mother to a stubborn calf. It is one of the few tasks that are just as difficult and disagreeable as they were in grandpa's day.

A mechanical calf weaner may remain a dream of weary farm boys, but modern power machinery has already revolutionized most other farm jobs. This equipment saves much of the muscle work that farming used to require, and steals hours from the clock that can be invested in other projects or spent with the family. It reduces the weather hazard, cuts production costs—helps to make farming a more stable and profitable business.

No wonder so many farm boys are sticking with the land rather than seeking their fortunes in the city. They are discovering first-hand that the farm offers opportunities for profit and a satisfying way of life that few jobs in town can match. Yes, modern John Deere power equipment is doing a lot to keep our ambitious boys and girls on the farm where their leadership can help to realize our dream of a more productive agriculture, a stronger America, and a better world.



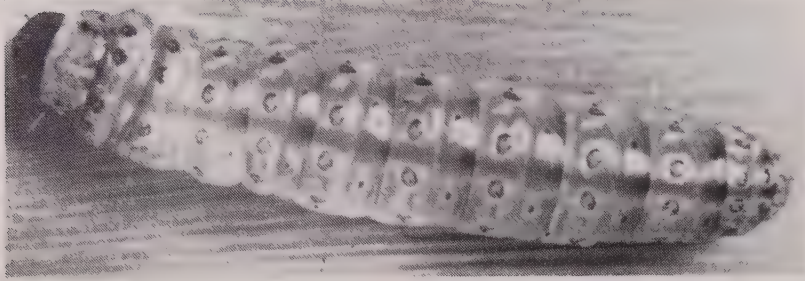
**JOHN DEERE • MOLINE • ILLINOIS**





# The Worm that Came to Dinner

By Arthur Pille



European Corn Borer Larva—Courtesy, Illinois Natural History Survey.

With losses at an all-time high last summer, Illinois farmers are looking for new and better ways to fight the corn borer. Illinois alone suffered \$66,000,000 damage. Other states were hit harder with the Corn Belt total being \$295,000,000. As these figures are based on current prices, the amount is even more astounding when based on support prices.

It would pay corn producers to be familiar with two strains of the insect—a one-generation and a two-generation strain. At the present the two-generation species is the more important.

The borer survives the winter in old cornstalks. Early in the spring, it pupates, or goes into a resting stage. Adult

moths usually hatch in mid-June. Egg-laying reaches its peak in early July. Moths lay eggs in masses on the underside of the corn leaf. They always select the tallest and most succulent corn.

Eggs hatch in a week and the worms or larvae burrow into the stalk. They will die if the corn is too small at hatching time. Most borers survive when they hatch on corn about to tassle. Boring also opens the way for entrance of plant diseases.

First-generation borers mature in late July when the moths again emerge. Their eggs are laid on the more tender stalks, as was true with the first brood. This new brood of borers remains in the stalk during the winter.

## Late Planting Is Best Control

Knowing the habits of the borer, the most obvious control measure is to regulate the size of the corn. This can be done by careful selection of the planting date. Corn planted before May 15 is open to severe attack. It will be at the right size when the borers hatch in early July. To escape early injury, delay planting until after mid-May.

Similarly, very late corn will be tender targets for the second brood of borers. Fields planted before June 1 will usually be mature enough to discourage the worms. However, this year was an exception. Favorable weather conditions aided the second generation and resulted in greater damage to the late corn.

Fertilizers play a large part in determining the size of corn. Heavy applications to early seedlings will bring it to a size that favors the early brood. Late fields should be fertilized to speed them to maturity before the second egg-laying.

## Cleanup Methods Are Essential

The best way to reduce the next year's infestation is by clean farming. Complete covering of all stalks will effectively stop the emergence of any moths. Complete coverage by plowing is the best way. To be effective, this should be done before May 10. Disking before plowing will improve the efficiency of this method. As moths can fly long distances, all cleanups must be community efforts. Burning of stalks is not recommended. (Please turn to page 16)

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## THE FARMER

*If you can do the job of any toiler,  
Carpenter, mason, plumber, engineer  
If you can drill a well and man a boiler,  
And practice fifty other trades a year,  
If you can run machines and doctor  
cattle,*

*Keep setting hens on duty at the nests,  
If you can fight an unrelenting battle  
With endless armies of invading pests,  
If you can face the hazards of the  
weather,*

*Gambling with nature with your all  
at stake;*

*And when your lucks against you al-  
together,*

*Fight on and never let your courage  
break;*

*If you can hold your patience when  
you're coping*

*With drought or flood, with blight and  
smut and scale;*

*And lose, and start again and keep on  
hoping;*

*In spite of all the harvests that may fail;  
If you can share the burdens of your  
neighbors gladly*

*But leave their own affairs their own;  
If you can see your every task as  
thrilling*

*Because, though sometimes wearily you  
plead,*

*You know each stubborn furrow you are  
tilling*

*Is new wealth you've created from the  
sod;*

*If you can feel a joy of turning over  
The good brown earth in furrows  
cleanly run;*

*If you love the scent of oats and wheat  
and clover*

*And yellow corn that ripens in the sun;  
If you don't rob the soil, yet go on  
getting*

*From every acre all that it is worth  
You are a FARMER, son—and I am  
betting*

*You wouldn't trade with anyone on  
earth.*

*Saturday Evening Post  
... Berton Braley*

## And We Did This, Too!

You no doubt remember the Agricultural booth at Farm and Home Week. However, you may not have known that we were doing more than just selling the Illinois Agriculturist. Here is a partial list of our proudly extended services.

Where to purchase different tickets  
Location of University buildings  
Currency exchange—in action  
Post office—in action  
Explanation of how to put in a telephone call  
Direction to rest rooms  
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Waste Basket  
Loaning agency  
General information  
Direction to a coke machine  
Keeping track of friends  
Direction to campus bus stops  
Check room for clothes and parcels  
Nursery  
Meeting place  
Time information

## MARK THESE DATES

Plowboy Prom ----- April 28  
All Ag Banquet ----- May 17  
Home Ec Club Banquet --- May 18

## BREEDERS INDEX

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## Spotlight on Your Rural Youth Leaders: Reet and Curt

By Evalyn Smith and  
Fred Kerr



CLARETA WALKER



CURT KENYON

Claretta Walker ("Reet" to you Rural Youthers) says, "If we can give a little help to youth now, it will magnify itself many times as they grow older." Officially Miss Walker is the Illinois Rural Youth extension specialist.

She grew up on a farm in Kendall county near Oswego, Illinois. She was a member of the local 4-H club and attended high school at Oswego and Aurora. After graduating from Iowa State college with a degree in home economics, Miss Walker taught at Amboy community high school. While teaching, she lived with the home adviser of Lee county. She often "loaned" the home economics laboratory to the home adviser for demonstrations and helped

with the 4-H clubs. In this manner, Miss Walker became interested in extension work.

In January, 1935, Miss Walker went to Carlinville as Macoupin county home adviser. In three months a Rural Youth was organized which soon became active through the encouragement of the advisers and the cooperation of the young people. In addition to the many activities in which all Rural Youthers participated, this group enjoyed Mississippi river boat trips and the writing of radio scripts for actual broadcast.

### Studied Family Relationships

In 1942, Miss Walker came to the U. of I. campus as a Rural Youth extension specialist. She first accepted

this position on a part-time basis in order to study for her master's degree in family relationships.

Miss Walker believes that "outdoor education is one of the best ways to develop leadership and hobbies—whittling being one of the current ones." In serving as extension specialist during the last seven years, Miss Walker has helped with camping programs in Illinois, totaling a month in different camps each year. Rural Youthers have grown to regard her as an old friend.

"Why do you like your work?" In answer to that question Miss Walker says, "Because of the great variety in the Rural Youth programs and because I have the opportunity of knowing people all over the state." She "believes in rural people and their progressiveness."

### Curt Kenyon

Do you remember meeting Mr. Woody Birch last summer at state Rural Youth camp? Today we're presenting his voice, Curt Kenyon.

Curt spent his boyhood in the Windy City and attended Wright junior college there. During the war he worked for a time building C-54 cargo planes with Douglas Aircraft. He served a year and a half in the 95th Infantry.

Curt graduated from the University of Illinois in 1946 with a degree in general agriculture and agronomy. After working with the soil survey six months, he started work on a master's degree in agricultural economics and rural sociology.

### Works with Claretta Walker

He began his Rural Youth work February 16, 1948, when he was appointed Illinois Rural Youth specialist in agriculture extension, as a co-worker with Claretta Walker.

Curt stresses youth programs that provide the maximum number of opportunities for rural young people. This youth program may be broken down into service, recreation, and education, both within the group and in the community.

Besides being a ventriloquist, Curt is an amateur magician, a landscape artist, and a cartoonist. His pet job is attending Rural Youth organization meetings.



## Armour Quiz . . . Test your knowledge!

If you answer these questions correctly you have a high I. Q.—as far as cattle raising and beef packing are concerned.

### Questions

- How much of an average beef steer "on the hoof" is meat?  
☐ 45%    ☐ 55%    ☐ 63%
- Beef animal dressing percentages vary with age, sex, finish, and other factors. Which of the following is the closest range of dressing percentages of beef animals?  
☐ 40-70%    ☐ 30-60%    ☐ 48-65%
- The short loin, source of the best steaks, is about what percent of a beef carcass?  
☐ 5%    ☐ 9%    ☐ 14%    ☐ 18%
- The hide from a \$200 steer is worth approximately how much? (When sold by the packer).  
☐ \$15    ☒ \$24    ☐ \$68

### Answers

- The average beef steer has a dressing percentage of about 55%.
- The correct answer is 48-65%. Top quality beef steers, shrunk out for show, may yield 70%.
- Only 9% of a beef carcass is short loin.
- About \$15.

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## Four Illinois 4-H'ers Receive Highest Club Honors

By Dorothy Giese

Four outstanding 4-H'ers have been selected to represent Illinois' 53,000 4-H members at National 4-H Club Camp in Washington, D. C. June 14 to 21, 1950.

### Barbara Thiebaud

Barbara Thiebaud, who is on the editorial staff of the Illinois Agriculturist and who is active in the home economics club, is one of the two girls who will attend the camp from Illinois. Now a sophomore in home economics education at the University of Illinois, Barbara is from Greenfield in Greene county. She has completed ten years of club work and was junior leader of the 'club of the year' in Greene county last year. In 1948 she was a delegate to National 4-H Club Congress and has attended the Illinois state fair four years to participate in demonstration contests and dress revues.

### DiAnne Mathre

The other girl who is attending national camp from Illinois is DiAnne Mathre of DeKalb in DeKalb County. Her impressive record of community services helped her to win the 1949 national 4-H citizenship contest. DiAnne has completed 8 years of club work and is a freshman at DeKalb State Teachers College.

### Kenneth Heisner

Two fellows from Illinois have also been chosen. Kenneth Heisner of Peotone in Will County has built up a dairy herd of twelve head during his ten years of 4-H work and is now farming with his brother. In addition to 4-H he has been active in F. F. A. work and earned the State Farmer degree.

### John White, Jr.

During nine years of 4-H club work, John White, Jr. of Batavia in Kane County has completed 108 projects for an outstanding record of achievement. He has been active in demonstration and judging work as well as taking part in many school and community activities. Now he is attending a short course in herdsmanhip on a scholarship at Iowa State College and expects to enroll in an agriculture curriculum.

Being chosen to attend National Camp is the highest delegate honor that 4-H members can receive. The delegates from each state and foreign countries will meet nationally known people, tour historic places, and attend governmental functions. The eventful week will be an experience never to be forgotten by them.

Teen-age Daughter (as the radio ground out the final notes of the latest swing hit): "Did you ever hear anything so wonderful?"

Father: "Only once, when a truck loaded with empty milk cans hit a freight car filled with live ducks."

\* \* \*

"The traps on this golf course are very annoying, aren't they?"

"Yes, would you mind closing yours?"

\* \* \*

She: "Where's your chivalry?"

He: "Oh I just turned that in for a Buick."

\* \* \*

"Why, I'm ashamed of you, my son," the father fumed at his loafing. "When George Washington was your age, he had become a surveyor, and was hard at work."

"And when he was your age," the boy said softly, "he was President of the United States."

Dad: "I've worked hard for fifty years, son. I feel that it's time for me to turn the business over to you and retire."

Son: "Ah, shucks, Dad, why don't you work a little longer and then both of us can retire."



**IF EVERY FARMER KNEW**  
**The Full Value of Inoculated Legumes**

\*ABOVE: Comparative yield from two 250-foot rows—nubbins on left did not have benefit of inoculated cover crop.

The bigger yields of clovers, alfalfa, soybeans and lespedeza you get from inoculation is not your only benefit. Inoculation with NITRAGIN helps these and other legumes but it helps boost yields of other cash crops, too. The Georgia farmer pictured above reaped 56.3 extra bushels of higher quality corn from a test acre that followed an inoculated legume cover crop. The pile on the right easily shows the extra benefits of inoculating all legume crops, whether they are used for hay, seed, or soil-building. For best results with legumes, always use NITRAGIN . . . the inoculant in the orange-colored can.

\*Name of farmer on request



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# STALK AND STUBBLE

## New Ag Building Plans Nearly Completed

At the present time the Ag college is living with practically the same facilities it had in 1925. The dairy science department is occupying office and lab space that is deemed about one fourth of an effective optimum. The animal science department is similarly cramped for space.

Realizing these very serious deficiencies in present facilities, a new Dairy and Animal Science building has been proposed and approved. The plans for this building are in the final stages, and the supervising architect has announced that bids will be asked on this building in the near future.

This new building, in conformance with the plans for the development of the Ag college to the east and south, will be located just east of Mumford hall and just south of Gregory drive. In this position it will occupy the very center of the future Ag campus.

### House Two Departments

The Animal Nutrition division will occupy a part of the basement, the entire first floor, and the west half of the second floor. A part of the department of food technology, as a temporary measure until they have their own building, will occupy the remainder of the second floor with the exception of some space at the east end which will house the breeding division of the dairy science department. The entire third and fourth floors will be occupied by the rest of the Dairy Science department with its departmental offices on the third floor.

In addition to one large lecture room and other small classrooms, this building will provide sufficient office space for the departments involved. Also, the very latest in laboratory design and facilities for furthering research in these fields will be found here.

## New Veterinary Building Next in Line

The College of Veterinary Medicine is next in line for a much needed building. It will be a three-story structure plus a basement. It will be a flat-roofed affair roughly the size of Mumford Hall. Plans call for the academic section to be built as soon as possible with a clinic to be constructed at a later date.

The new structure will be located midway between Goodwin avenue and the Dairy Manufactures Building. Peabody drive will be extended and resurfaced to afford a paved street in front of the building as it will face north.

The architect's plans are in their final

stages and are not expected to undergo any further changes.

At present the College of Veterinary Medicine, having an enrollment of 24 freshmen and 24 sophomores, is located in three buildings widely scattered across south campus. The main offices and academic section is housed in a former sorority house at 805 West Pennsylvania avenue in Urbana; clinical and laboratory work is carried on in the old military stables and in a former beef cattle barn on south campus.

## Twin Headed Calf Provides Attraction

The phrase "two heads are better than one" has limitations, especially when both of them are on the same animal.

These were the sentiments of Phil Edgerley of Granville, a student here at the University, when one of his heifers gave birth to a still-born twin headed calf. Edgerley had the calf uniquely mounted with one head in a milk bucket and the other in a feed box.

The calf, having a shorthorn sire and a Holstein dam, exhibited two perfectly formed heads divided at the first cervical neck vertebra. Color markings were identical on both heads and each complete to the extent of having a fully developed brain. According to Jim Shoger, a pre-vet student, who did the taxidermy, the spinal cord, esophagus, and trachea all had characteristic "Y" branching formation.

The remainder of the black and white bull calf's body was normal in every respect. Had not birth complications been present, the calf may well have been born alive.



Jim Shoger poises Phil Edgerley's double headed calf.

## M. L. Mosher, Professor of Farm Management Will Retire

M. L. Mosher, retiring professor of farm management, was the guest of honor at the Farm Management luncheon held during Farm and Home Week in the Illini Union Ballroom. Also guests at the luncheon were many of the 99 farmers who had cooperated in farm management projects for twenty-five years or more.

Honoring Professor Mosher upon his retirement which will occur on Sept. 1, 1950, were T. H. Brock speaking for the farm advisers of Illinois, Lester Pfister, well-known hybrid corn developer, W. A. Herrington who spoke for the Farm Bureau Farm Management service, and E. D. Lawrence in behalf of the co-operators in farm record keeping.

Professor H. C. M. Case, head of the Department of Agricultural Economics told of the early days of Mosher's service when as a farm adviser in Woodford county he would drive a team of horses from school to school telling farmers about corn selection and other good farm practices. Case also told how Mosher and he drove from farm to farm to encourage farm account record keeping. Continuing, Case said, "Mosher may have missed his calling in not being a chef as he often passed out his information in the form of recipes—for good farming."

Case also spoke of the vital interest in home, church, school, and family that was shared by Professor and Mrs. Mosher and gave them his best wishes for the future.

### His Past Years Have Been Busy

Mosher spent his early life on a farm in Muscatine county, Iowa. He received the degree of B.S. in agriculture from Iowa State College in 1905 and master of agriculture in 1915. From 1905-1906 he was farm crops instructor at the Iowa State College, and from 1906 to 1912 he served as crop specialist for the Iowa extension service, resigning to become the first county agent in Iowa.

In 1908 and 1909 Professor Mosher did special corn work in Mexico. He then worked as county agent in Clinton county, Iowa, from 1915-1919, when he became the first farm adviser in Woodford County, Illinois. He was president of the Illinois State Agricultural Agents in 1920 and 1921. As farm adviser in Woodford county, he encouraged farmers to keep records in the extension project in farm management and to use all good farming practices. He thus helped to establish the Farm Bureau Farm Management Service.



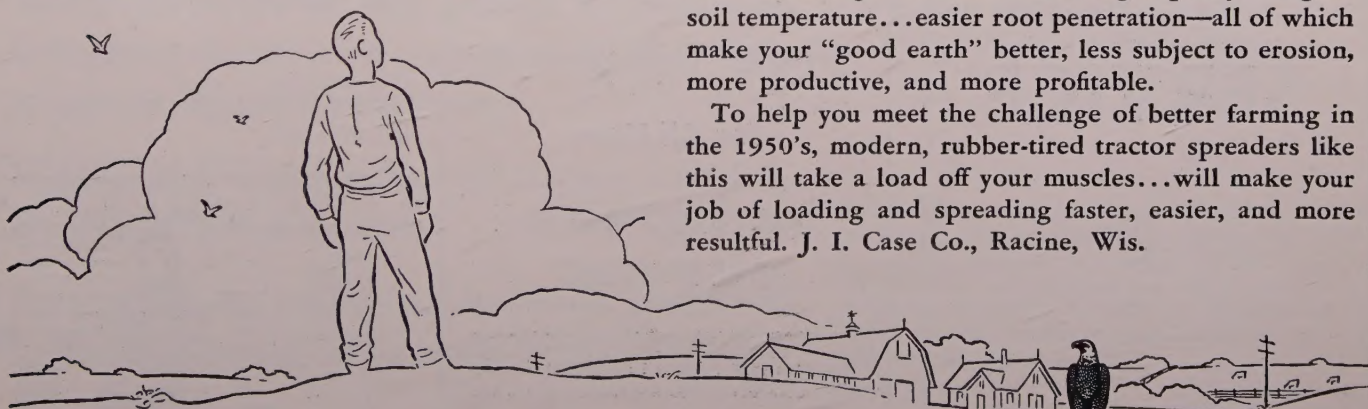


# ANOTHER CHALLENGE to Farming in the 1950's

● Never underestimate the value of manure in livestock farming. Ten years from now, when you tear the last calendar page from the decade of the 1950's, the size of your bank account may well be determined by the tonnage of manure you have spread on your farm.

For manure is truly a "magic" fertilizer. Well managed, it can return to the soil 75% of the plant foods that nourished your crops. Even more important, it can put new life into your land by adding organic matter for better tilth...greater water - holding capacity...higher soil temperature...easier root penetration—all of which make your "good earth" better, less subject to erosion, more productive, and more profitable.

To help you meet the challenge of better farming in the 1950's, modern, rubber-tired tractor spreaders like this will take a load off your muscles...will make your job of loading and spreading faster, easier, and more resultful. J. I. Case Co., Racine, Wis.



The features you want most in a spreader—easy loading, easy hitching, even spreading and long service—are combined in Case spreaders, both the popular T6 and the new, still larger T8 (shown at top). The hip-high box takes some of the lift out of loading; the self-raising hitch takes *all* of the lift out of hitching, allows tractor a running start during get-away. Steady apron travel gives even spread; beaters and widespread give thorough shredding. Like *all* Case equipment, both spreaders are built for many years of good service.



# CASE



**New Varieties . . .**

(Continued from page 8)

Also the grain shatters easily in some sections. It is adapted to southern Illinois.

Vigo has slightly outyielded Royal in extreme southern Illinois but Royal has outyielded Vigo in central and southwestern Illinois.

Two relatively new hard winter wheats for central and northern Illinois are Westar and Triumph. Westar is a promising new wheat from Texas. It is best adapted to central Illinois. Triumph is a farmer made selection from Oklahoma. It is short and quite early. Yield has been sacrificed for earliness.

Two varieties which have done well but are still in the experimental stage are Illinois 40-679 and TN 1016-4. Illi-

nois 40-679 is a bearded white chaffed soft wheat that shows promise. At Urbana in 1949 it had the highest yield with 56 bushels per acre. TN 1016-4 was third ahead of Pawnee, Westar, Wichita, Royal, and Vigo. One year results on TN 1016-4 were outstanding over the state in general.

Also an improved Thorne selection developed at Ohio State looks good for southern Illinois.

It is likely that other improved varieties will be available in the future. The Experiment Station has expanded its testing program especially in the vicinity of Randolph and Wabash counties. Also plant breeders are breeding for short stiff straw, more disease resistance especially against leaf rust, Hessian fly resistance, and of course higher yields.

**Barley**

Spring barley is making a comeback in the northern half of the state. Acreage in 1949 was up 16 per cent. This increase probably is largely due to better varieties.

Moore is one of these new varieties. It is a promising white seeded smooth-awned variety released by Wisconsin in 1948. Its head is moderately compact. In two years of testing Moore has been outstanding in yield and in resistance to lodging. It has moderate resistance to spot blotch, mildew, and stem rust but it is susceptible to leaf rust, stripe, loose smut, and covered smut.

There are but part of the varieties that are available to farmers throughout the state. There are older varieties that still are popular and new and better varieties will constantly be made available. Each of you must decide for yourself what variety best fits your requirements.

**Corn Borer . . .**

(Continued from page 10)

mended because it misses many borers and destroys valuable organic matter.

Hybrids well adapted to local conditions suffer least borer damage. The moths seem to avoid certain hybrids or inbreds. Some plants have the strength and sturdiness to produce a good crop even when infested with the borers. Of late, Illinois seed producers have been giving more attention to these factors.

Use of chemical insecticides has become more popular in recent years. This is especially true of seed producers and others who find it impractical to delay planting. Most farmers will find them too expensive except in extremely bad seasons. Earliest and most advanced fields will benefit the most. Insecticides should be applied 10 to 14 days after the first hatching of borers.

Illinois Experiment Station tests show that DDT and Ryania are the best chemicals to date. DDT is highly effective and relatively inexpensive. It can be applied as a spray or dust. Ryania is also good, but, owing to its newness, is in rather short supply now.

Other minor control measures are generally ineffective. Among these are introduction of borer parasites and shredding of stalks. Our main methods are still the cultural practices of late planting and clean farming.

**CHIPS . . .**

Son: "Dad, how much is untold wealth?"

Dad: "All that does not appear on the income tax report."

\* \* \*

"I trust you found that novel interesting," the librarian remarked hopefully.

"No, not very," the patron replied, "but the letter someone left in it for a book mark was certainly a lulu."

\* \* \*

Doctor: "You cough with greater ease this morning, I see."

Patient: "I should! I've been practicing all night."

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"Say, Pop I painted the milk stool today."



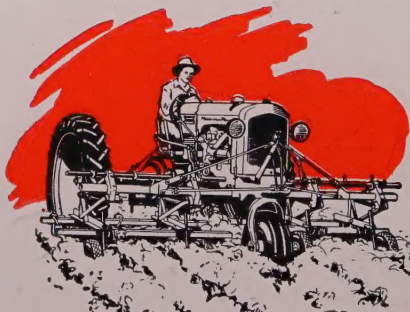


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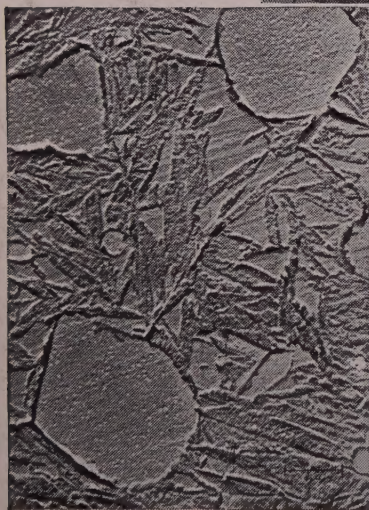
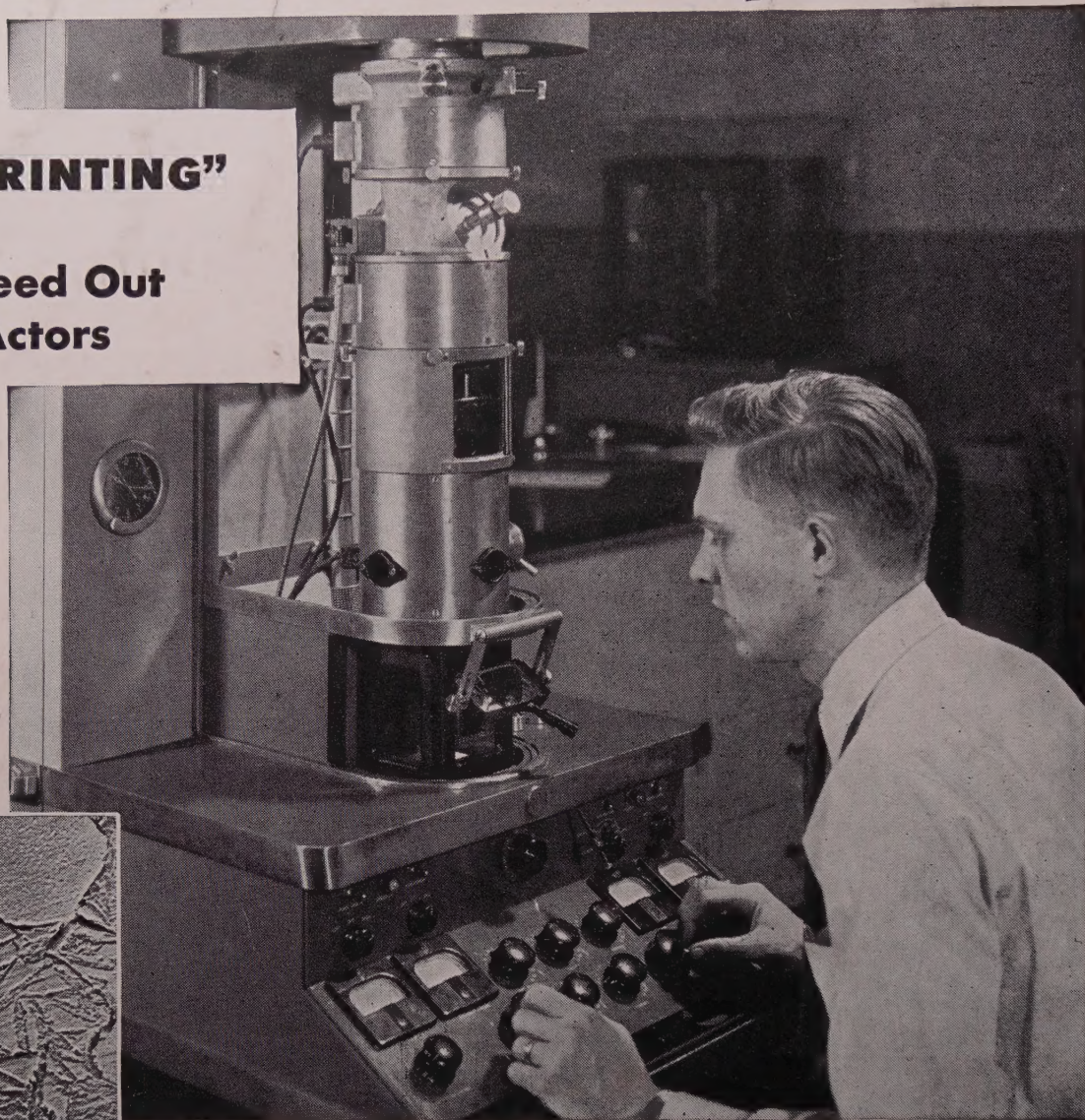
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## Men and Machines that Help International Harvester Leadership

### "FINGERPRINTING" METALS

To Weed Out  
Bad Actors



Here's what an IH researcher sees when he looks at a sample of steel under the electron microscope. This is a picture of the internal structure of heat-treated steel.

### Electron Microscope Helps IH Researchers to Study Minute Particles Never Seen Before

An electron microscope, which enlarges objects 100,000 times, helps IH researchers to study the make-up of metals. Minute particles that hide from ordinary microscopes are easily seen. This enables International Harvester technicians to "fingerprint" metals—to actually *take the measure* of particles in steel. These findings help

to solve practical manufacturing problems in IH factories.

The 250 technicians at IH Manufacturing Research work closely with product engineers and production men in IH factories. This trail-blazing team constantly seeks ways to improve today's farm equipment—helps to plan even better products for the future.

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Motor Trucks ...



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